CLAIMS

What is claimed is:

1. In an apparatus, a method of operation comprising:

powering a hardware element of the apparatus with a power supply of the apparatus;

operating the hardware element at a first power consumption level;

monitoring for absence of AC to the power supply;

generating a signal to indicate AC failure on detection of absence of AC to the power supply; and

in response, throttling the hardware element to operate at a second power consumption level that is a reduced power consumption level than the first power consumption level.

2. The method of claim 1, wherein the monitoring and generating are performed by the power supply.

3. The method of claim 1, wherein

the hardware element operates at a first clock frequency when operating at the first power consumption level; and

the throttling of the hardware element comprises switching the hardware element to operate at a second clock frequency slower than the first clock frequency.

4. The method of claim 1, wherein

the hardware element operates at a first voltage when operating at the first power consumption level; and

the throttling of the hardware element comprises switching the hardware element to operate at a second voltage lower than the first voltage.

5. The method of claim 1, wherein the hardware element comprises a processor and the throttling of the hardware element comprises periodically interrupting a processor clock.

6. The method of claim 1, wherein the hardware element comprises a selected one of a processor and a chipset.

7. The method of claim 1, wherein the method further comprises

waiting for a period of time; and

initiating a process to suspend the apparatus to memory, if AC remains absent to the power supply after waiting for the period of time.

8. The method of claim 7, wherein the method further comprises canceling the wait if AC returns during the waiting period.

9. The method of claim 1, wherein

the hardware element comprises a processor; and

the throttling comprises a chipset in response to the signal, signaling the processor to switch from operating at the first power level of consumption to the second power level of consumption.

10. In an apparatus, a method of operation comprising:

monitoring for re-presence of AC to a power supply of the apparatus after an earlier absence of AC to the power supply;

generating a signal to indicate the presence of AC on detection of re-presence of AC to the power supply; and

throttling a hardware element to switch to operate at a first power consumption level from operating at a second power consumption level, the second power consumption level being a reduced power consumption level than the first power consumption level.

11. The method of claim 9, wherein the monitoring and generating are performed by the power supply.

12. The method of claim 9, wherein

the hardware element operates at a first clock frequency when operating at the first power consumption level, and at a second clock frequency when operating at the second power consumption level, the first clock frequency being faster than the second clock frequency; and

the throttling of the hardware element comprises switching the hardware element from operating at the second clock frequency back to operating at the first clock frequency.

13. The method of claim 9, wherein

the hardware element operates at a first voltage when operating at the first power consumption level, and at a second voltage when operating at the second power consumption level, the first voltage being higher than the second voltage; and

the throttling of the hardware element comprises switching the hardware element from operating at the second voltage to operating at the first voltage.

14. The method of claim 9, wherein the hardware element comprises a processor, and the throttling comprises ceasing interruption of a processor clock.

15. The method of claim 9, wherein

the hardware element comprises a processor; and

the throttling comprises a chipset in response to the signal, signaling the processor to switch to operate at the first power consumption level, from operating at the second power consumption level.

16. A system comprising:

a power supply including a monitor to detect for absence of AC, and generate a first signal to indicate accordingly on so detecting; and

a hardware element coupled to the power supply, and equipped to normally operate in a first power consumption level, and to switch to operate in a second consumption level that is a reduced power consumption level than the first power consumption level, in response to a selected one of the first signal and a second signal generated in view of the first signal.

17. The system of claim 15, wherein

the hardware element operates at a first clock frequency when operating at the first power consumption level; and

the hardware element switches to operate at a second clock frequency that is slower than the first clock frequency, when operating at the second power consumption level.

18. The system of claim 15, wherein

the hardware element operates at a first voltage when operating at the first power consumption level; and

the hardware element switches to operate at a second voltage that is lower than the first voltage, when operating at the second power consumption level.

19. The system of claim 15, wherein

the hardware element comprises a processor;

the processor operates with on an uninterrupted processor clock when operating at the first power consumption level; and

the processor switches to operate interrupting the processor clock periodically, when operating in the second power consumption level.

20. The system of claim 15, wherein the hardware element comprises a selected one of a processor and a chipset.

21. The system of claim 15, wherein

a mechanism coupled to the power supply to facilitate transfer of control to an operating system in response to the first signal; and

the operating system equipped to initiate a suspend process to suspend the system to memory, after waiting a period of time.

22. The system of claim 15, wherein the system further comprises a networking interface.

23. An article of manufacture comprising:

a storage medium; and

a plurality of programming instructions stored on the storage medium, and designed to program an apparatus to enable the apparatus to initiate a suspend process to suspend the apparatus to memory when the apparatus is in an AC failed condition, powered by a backup power, after waiting a period a time.

24. The article of claim 22, wherein the programming instructions are further designed to enable the apparatus to cancel the delayed initiation of the suspend process if AC returns during the waiting period.

25. The article of claim 22, wherein the programming instructions are further designed to enable the apparatus to complete a resume process, continuing operation from a previously suspended system state, if AC returns while the apparatus is in the suspended to memory state.